INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*
**Governor**

*Thomas W. Easterly*
**Commissioner**

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
**www.idem.IN.gov**

TO: Interested Parties / Applicant

DATE: March 23, 2011

RE: Peabody Midwest Mining / 153-30273-00011

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

## Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice.** The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot12/3/07

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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James F. Tolen
Peabody Midwest Mining LLC - Bear Run Mine
7100 Eagle Crest Blvd, Suite 200
Evansville, IN 47715

March 23, 2011

Re: 153-30273-00011
Second Notice-Only Change to
M153-28491-00011

Dear James Tolen:

Peabody Midwest Mining LLC - Bear Run Mine was issued a Minor Source Operating Permit (MSOP) No. M153-28491-00011 on August 9, 2010, for a stationary open pit surface coal mining operation and coal preparation and processing plant located at 7255 East CR 600 South, Carlisle, Indiana 47838. On February 25, 2011, the Office of Air Quality (OAQ) received an application from the source requesting the following changes to the permit:

1. to revise the calculations and facility descriptions in Sections A.2 and D.2 of the permit to indicate that the Dry Crush Circuit and Fines Crush Circuit will be constructed as one (1) single process line in series instead of two (2) separate process lines in parallel, to rename the Fines Crush Circuit to the Dry Stoker Circuit, to remove Units 47, 48, and 49, and to indicate that Units 44, 46, 50, 51, 52, 54 will not be enclosed. This modification to the process will result in an increase in the potential to emit particulate matter (PM) of 0.9 tons per year. This modification to the source is considered a notice-only change, since the increase in potential emissions of regulated criteria pollutants and hazardous air pollutants are less than the ranges specified 326 IAC 2-6.1-6(g)(4) and 326 IAC 2-6.1-6(d)(10), respectively. The uncontrolled/unlimited potential to emit of the entire source will continue to be less than the threshold levels specified in 326 IAC 2-7. The addition of these units will not cause the source-wide potential to emit to be greater than the threshold levels specified in 326 IAC 2-2 or 326 IAC 2-3.

2. to revise the calculations and the facility descriptions in Sections A.2 and D.2 of the permit to indicate that the Process Circuit water misters for Units 19, 20, 20a, 21, 22, 24, and 25 will be removed as emission controls, since the use of these water misters causes excessive moisture in the final washed coal product. These changes to the permit are considered notice-only changes pursuant to 326 IAC 2-6.1-6(d)(2), since they are minor administrative changes in descriptive information concerning the source or emissions units. The uncontrolled potential to emit from these units will not change as a result of these changes, since the moisture content of the coal processed at the coal preparation/processing plant after washing in the Preparation Plant will still be maintained at or above 11.5 percent by weight.

3. to revise the facility description for Unit 20b in Sections A.2 and D.2 of the permit to indicate that Unit 20b is a stacking conveyor.

4. to revise Attachment A of the permit (Fugitive Dust Control Plan) to include a Material Safety Data Sheet (MSDS) for an additional dust control product that is in use at the site and to update the site location maps *(note: the updated FDCP is included in its entirety in the MSOP as Attachment A, but the changes to the FDCP are not shown in bold and strikethrough text in this letter).*

IDEM, OAQ has decided to make additional revisions to the permit as described below.

5. Condition D.2.2 of the permit has been revised to include a 326 IAC 6-3-2 Allowable Particulate Emission Rate (pounds per hour) for Units 21, 22, 24, 25. Pursuant to 326 IAC 6-3-1(b), the requirements of 326 IAC 6-3-2 are applicable to Units 21, 22, 24, 25, since each of the units has potential particulate emissions greater than five hundred fifty-one thousandths (0.551) pound per hour.

Pursuant to the provisions of 326 IAC 2-6.1-6, the permit is hereby revised as follows with the deleted language as ~~strikeouts~~ and new language **bolded**.

1. The facility descriptions in Sections A.2 and D.2 of the permit and Condition D.2.2 have been revised as follows:

(c) one (1) coal preparation and processing plant, constructed in 2010 and approved for increased production in 2010, with a maximum processing rate of 15,918,500 tons of raw coal and coal refuse per year, combined, including the following equipment and activities:

(1) Process Circuit

...

(T) one (1) enclosed stoker coal conveyor, identified as Unit 19, with a maximum capacity of 500 tons per hour, ~~using water misting for particulate control,~~ and exhausting to the atmosphere;

(U) one (1) stoker coal storage bin with loadout weigh belt, identified as Unit 20, with a maximum capacity of 500 tons per hour, ~~using water misting for particulate control,~~ and exhausting to the atmosphere;

(V) one (1) enclosed stoker coal conveyor, identified as Unit 20a, with a maximum capacity of 500 tons per hour, ~~using water misting for particulate control,~~ and exhausting to the atmosphere;

(W) one (1) stoker coal stacking ~~tube~~ **conveyor**, identified as Unit 20b, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

...

(Y) one (1) enclosed clean coal conveyor, identified as Unit 21, with a maximum capacity of 2000 tons per hour, ~~using water misting for particulate control,~~ and exhausting to the atmosphere;

(Z) one (1) clean coal stacking tube, identified as Unit 22, with a maximum capacity of 2000 tons per hour, ~~using water misting for particulate control,~~ and exhausting to the atmosphere;

...

(BB) one (1) enclosed clean coal stacking tube transfer conveyor, identified as Unit 24, with a maximum capacity of 2000 tons per hour, ~~using water misting for particulate control,~~ and exhausting to the atmosphere;

(CC) one (1) clean coal stacking tube, identified as Unit 25, with a maximum capacity of 2000 tons per hour, ~~using water misting for particulate control,~~ and exhausting to the atmosphere;

...

(2) Dry Crush Circuit

...

(K) one (1) enclosed ~~crushed fines~~ **dry crush** coal conveyor with radial stacker, identified as Unit 42, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(L) one (1) ~~crushed fines~~ **dry crush** coal storage pile (unloading to the underground reclaim tunnel), identified as Unit 43, exhausting to the atmosphere;

(3) ~~Fines Crush~~ **Dry Stoker** Circuit

(A) one (1) ~~enclosed~~ feeder bin system, identified as Unit 44, with a maximum capacity of 400 tons per hour exhausting to the atmosphere;

(B) one (1) feeder bin outlet drop to ~~raw~~ coal conveyor, identified as Unit 45, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(C) one (1) ~~enclosed raw~~ coal conveyor, identified as Unit 46, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

~~(D) one (1) enclosed primary screen, identified as Unit 47, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;~~

~~(E) one (1) enclosed crusher, identified as Unit 48, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;~~

~~(F) two (2) enclosed collecting coal conveyors, identified as Units 49 and 50, each with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;~~

(~~G~~D) one (1) ~~enclosed secondary~~ screen, identified as Unit 51, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

**(E) one (1) collecting coal conveyor, identified as Unit 50, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;**

(~~H~~F) one (1) ~~enclosed~~ oversized **(stoker)** coal stacker conveyor, identified as Unit 52, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(~~I~~G) one (1) oversized **(stoker)** coal storage pile, identified as Unit 53, exhausting to the atmosphere;

(~~J~~H) one (1) ~~enclosed~~ fines coal stacker conveyor, identified as Unit 54, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(~~K~~I) one (1) fines coal storage pile, identified as Unit 55, exhausting to the atmosphere;

...

D.2.2 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of the following facilities shall not exceed the allowable emission rates listed in the following table:

| Unit ID | Description | Process Weight Rate (tons per hour) | 326 IAC 6-3-2 Allowable Particulate Emission Rate (pounds per hour) |
|---|---|---|---|
| ... | | | |
| **21** | **Plant clean coal conveyor** | **1600** | **83.83** |
| **22** | **No. 4 clean coal stacking tube** | **1600** | **83.83** |
| **24** | **Clean coal stacking tube transfer conveyor** | **1500** | **82.95** |
| **25** | **No. 3 clean coal stacking tube** | **1500** | **82.95** |
| ... | | | |
| 42 | ~~Crushed fines~~ **Dry crush** coal conveyor with radial stacker | 2000 | 86.90 |

...

All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit. A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Nathan Bell, of my staff, at 317-233-5670 or 1-800-451-6027, and ask for extension 3-5670.

Sincerely,

Alfred C. Dumaual, Ph. D., Section Chief
Permits Branch
Office of Air Quality

Attachments: Updated Permit and Calculations

ACD/ncb

cc: File - Sullivan County
Sullivan County Health Department
U.S. EPA, Region V
Compliance and Enforcement Branch
Billing, Licensing and Training Section

**Attachment A: Emissions Calculations**
**Emission Summary**

**Company Name:** Peabody Midwest Mining LLC - Bear Run Mine
**Source Address:** 7255 East CR 600 South, Carlisle, IN 47838
**Minor Source Operating Permit No.:** M153-28491-00011
**Notice-Only Change No.:** 153-30273-00011
**Permit Reviewer:** Nathan C. Bell

| | Uncontrolled/Unlimited Potential to Emit (PTE) (tons/year) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Process Description | PM | PM10 | PM2.5 | SO2 | NOx | VOC | CO | Total HAPs | Worst Single HAP | |
| **Coal Preparation/Processing Plant (Fugitive and Non-Fugitive Emissions)*** | | | | | | | | | | |
| Coal Preparation/Processing Plant Material Handling | 63.84 | 27.50 | 3.82 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| Coal Preparation/Processing Plant Material Storage Piles (fugitive) | 14.43 | 5.05 | 5.05 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| Coal Preparation/Processing Plant Unpaved Roads (fugitive) | 241.76 | 62.37 | 6.24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| **Total*** | **320.03** | **94.91** | **15.11** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **---** |
| **Coal Mine (Fugitive Emissions)**** | | | | | | | | | | |
| Coal Mining (fugitive)** | 4949.03 | 2573.49 | 148.47 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| Coal Mine Storage Piles (fugitive)** | 25.07 | 8.78 | 8.78 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| Coal Mine Unpaved Roads (fugitive)** | 6180.99 | 1594.52 | 159.45 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| **Total**** | **11155.09** | **4176.79** | **316.70** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **---** |

| | Limited Potential to Emit (PTE) (tons/year) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Process Description | PM | PM10 | PM2.5 | SO2 | NOx | VOC | CO | Total HAPs | Worst Single HAP | |
| **Coal Preparation/Processing Plant (Fugitive and Non-Fugitive Emissions)*** | | | | | | | | | | |
| Coal Preparation/Processing Plant Material Handling | Less than 40.00 | 27.50 | 3.82 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| Coal Preparation/Processing Plant Material Storage Piles (fugitive) | Less than 10.00 | 5.05 | 5.05 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| Coal Preparation/Processing Plant Unpaved Roads (fugitive) | Less than 200.00 | 62.37 | 6.24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| **Total*** | **Less than 250.00** | **94.91** | **15.11** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **---** |
| **Coal Mine (Fugitive Emissions)**** | | | | | | | | | | |
| Coal Mining (fugitive)** | 4949.03 | 2573.49 | 148.47 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| Coal Mine Storage Piles (fugitive)** | 25.07 | 8.78 | 8.78 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| Coal Mine Unpaved Roads (fugitive)** | 6180.99 | 1594.52 | 159.45 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| **Total**** | **11155.09** | **4176.79** | **316.70** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **---** |

| | Controlled/Unlimited Potential to Emit (PTE) (tons/year) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Process Description | PM | PM10 | PM2.5 | SO2 | NOx | VOC | CO | Total HAPs | Worst Single HAP | |
| **Coal Preparation/Processing Plant (Fugitive and Non-Fugitive Emissions)*** | | | | | | | | | | |
| Coal Preparation/Processing Plant Material Handling | 10.44 | 4.42 | 0.62 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| Coal Preparation/Processing Plant Material Storage Piles (fugitive) | 14.43 | 5.05 | 5.05 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| Coal Preparation/Processing Plant Unpaved Roads (fugitive) | 120.88 | 31.18 | 3.12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| **Total*** | **145.74** | **40.65** | **8.78** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **---** |
| **Coal Mine (Fugitive Emissions)**** | | | | | | | | | | |
| Coal Mining (fugitive)** | 4949.03 | 2573.49 | 148.47 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| Coal Mine Storage Piles (fugitive)** | 25.07 | 8.78 | 8.78 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| Coal Mine Unpaved Roads (fugitive)** | 3090.49 | 797.26 | 79.73 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- |
| **Total**** | **8064.59** | **3379.53** | **236.97** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **0.0** | **---** |

*Since the coal preparation/processing plant is in a source category for which there is an applicable New Source Performance Standard (i.e., NSPS, Subpart Y, Standards of Performance for Coal Preparation Plants) that was in effect on August 7, 1980, the fugitive emissions from the coal preparation/processing plant (a support facility for the coal mine) are counted toward the determination of PSD and Part 70 Permit applicability. For a detailed explanation, see the TSD section entitled "Fugitive Emissions".

**Fugitive emissions from the coal mine (blasting, removal of overburden, loading into trucks, dumping and storage of coal at the mine, and haul road traffic at the mine) are not be included in determining whether the entire source is major under PSD and Title V. For a detailed explanation, see the TSD section entitled "Fugitive Emissions".

**Attachment A: Emissions Calculations**
**Coal Preparation/Processing Plant**
**Material Processing, Handling, Crushing, Screening, and Conveying**

**Company Name: Peabody Midwest Mining LLC - Bear Run Mine**
**Source Address: 7255 East CR 600 South, Carlisle, IN 47838**
**Minor Source Operating Permit No.: M153-26491-00011**
**Notice-Only Change No.: 153-30273-00011**
**Permit Reviewer: Nathan C. Bell**

**Emission Factors for Material Processing, Handling, and Conveying (Batch or Continuous Drop Operations AP-42 Section 13.2.4)**

The following calculations determine the emission factors for handling (drop points within the process) of materials in the coal preparation/processing plant, based on the minimum anticipated moisture content of the raw coal prior to washing and after washing in the process.

$$Ef = k*(0.0032)*[(U/5)^1.3 / (M/2)^1.4]$$

where:
Ef = Emission factor (lb/ton)
k (PM) = 0.74 = particle size multiplier (0.74 assumed for aerodynamic diameter <=100 um)
k (PM10) = 0.35 = particle size multiplier (0.35 assumed for aerodynamic diameter <=10 um)
k (PM2.5) = 0.053 = particle size multiplier (0.053 assumed for aerodynamic diameter <=2.5 um)
U = 8 = worst case annual mean wind speed (miles/hour)

| Material | Minimum Material Moisture Content (%)* | PM Emission Factor (lb/ton)** | PM10 Emission Factor (lb/ton)** | PM2.5 Emission Factor (lb/ton)** |
|---|---|---|---|---|
| Raw coal prior to washing | 10.0 | 4.58E-04 | 2.17E-04 | 3.28E-05 |
| Coal after washing in processing plant | 11.5 | 3.77E-04 | 1.78E-04 | 2.70E-05 |

*Minimum material moisture content based on coal data for this mine and anticipated minimum moisture content after washing
**From AP-42 Section 13.2.4.3

**Emission Factors for Crushing/Breaking and Screening (AP-42 Section 11.19.2)**

The following emission factor are used to determine the PTE of crushing/breaking and screening of raw coal in the preparation/processing plant, based on the minimum anticipated moisture content of the raw coal

| Process Type | Minimum Material Moisture Content (%)* | PM Emission Factor (lb/ton)** | PM10 Emission Factor (lb/ton)** | PM2.5 Emission Factor (lb/ton)** |
|---|---|---|---|---|
| Tertiary Crushing/Breaking (controlled)** | 10.0 | 0.0012 | 0.00054 | 0.00010 |
| Screening (controlled)** | 10.0 | 0.0022 | 0.00074 | 0.00005 |

*Minimum material moisture content based on coal data for this mine
**The minimum moisture content of the raw coal (10.0%) is significantly higher than moisture content of crushed stone controlled by with wet suppression (0.55% to 2.88%) as indicated in AP-42 Section 11.19.2, Table 11.19.2-2.
Therefore, IDEM OAQ has calculated the PTE from the crushing/breaking and screening using controlled emission factors from AP-42 Section 11.19.2, Table 11.19.2-2.

| Process/Vent ID | Description | Type of Emission Point | Maximum Annual Throughput (tons/year) | Uncontrolled PTE of PM (tons/year) | Uncontrolled PTE of PM10 (tons/year) | Uncontrolled PTE of PM2.5 (tons/year) | Source of Emission Factor *See chart below* | Type of Controls | Overall Control Efficiency | Controlled PTE of PM (tons/year) | Controlled PTE of PM10 (tons/year) | Controlled PTE of PM2.5 (tons/year) | 326 IAC 6-3-2 Allowable Particulate Emission Rate: Maximum Process Weight Rate (tons/hour) | 326 IAC 6-3-2 Allowable Particulate Emission Rate: Maximum Hourly Emission Rate (lbs/hour) | 326 IAC 6-3-2 Allowable Particulate Emission Rate: Subject to 326 IAC 6-3? | 326 IAC 6-3-2 Allowable Particulate Emission Rate (lbs/hour) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Process Circuit** | | | | | | | | | | | | | | | | |
| 1 | Run of mine coal stockpile | stockpile* | | | | | | | | | | | | | | |
| 2 | Run of mine coal truck dump to feeder | drop | 14,000,000 | 3.21 | 1.52 | 0.23 | 1 | 95% - water mister | 95.0% | 0.16 | 0.076 | 0.011 | 2000 | 0.917 | yes | 86.904 |
| 3 | Feeder to run of mine coal breaker conveyor | drop | 14,000,000 | 3.21 | 1.52 | 0.23 | 1 | 95% - water mister | 95.0% | 0.16 | 0.076 | 0.011 | 2000 | 0.917 | yes | 86.904 |
| 4 | Run of mine breaker feed conveyor | conveyor | 14,000,000 | 3.21 | 1.52 | 0.23 | 1 | 95% - water mister, 90% enclosure | 99.5% | 0.02 | 0.008 | 0.001 | 2000 | 0.917 | yes | 86.904 |
| 5 | Scalping screen | screen | 14,000,000 | 15.40 | 5.18 | 0.35 | 3 | 95% - water mister | 95.0% | 0.77 | 0.259 | 0.018 | 2000 | 0.917 | yes | 86.904 |
| 6 | Rotary breaker | rotary breaker | 14,000,000 | 8.40 | 3.78 | 0.70 | 3 | 95% - water mister | 95.0% | 0.42 | 0.189 | 0.035 | 2000 | 0.917 | yes | 86.904 |
| 7 | Rotary breaker drop to breaker reject bunker | drop | 420,000 | 0.096 | 0.046 | 0.007 | 1 | 95% - water mister | 95.0% | 0.005 | 0.002 | 0.0003 | 2000 | 0.917 | yes | 86.904 |
| 8 | Breaker reject bunker | stockpile* | | | | | | | | | | | | | | |
| 9 | Raw coal conveyor No. 4 | conveyor | 13,580,000 | 3.11 | 1.47 | 0.223 | 1 | 95% - water mister, 90% enclosure | 99.5% | 0.016 | 0.007 | 0.0011 | 2000 | 0.917 | yes | 86.904 |
| 10 | No. 2 raw coal stacking tube | drop | 6,790,000 | 1.56 | 0.74 | 0.111 | 1 | 95% - water mister | 95.0% | 0.078 | 0.037 | 0.006 | 2000 | 0.917 | yes | 86.904 |
| 11 | No. 2 raw coal stockpile | stockpile* | | | | | | | | | | | | | | |
| 12 | Raw coal stacking tube transfer conveyor | conveyor | 6,790,000 | 1.56 | 0.74 | 0.111 | 1 | 95% - water mister, 90% enclosure | 99.5% | 0.008 | 0.004 | 0.0006 | 2000 | 0.917 | yes | 86.904 |
| 13 | No. 1 raw coal stacking tube | drop | 6,790,000 | 1.56 | 0.74 | 0.111 | 1 | 95% - water mister | 95.0% | 0.078 | 0.037 | 0.006 | 2000 | 0.917 | yes | 86.904 |
| 14 | No. 1 raw coal stockpile | stockpile* | | | | | | | | | | | | | | |
| 15 | Plant feed conveyor | conveyor | 13,580,000 | 3.11 | 1.47 | 0.223 | 1 | 95% - water mister | 95.0% | 0.156 | 0.074 | 0.0111 | 2000 | 0.917 | yes | 86.904 |
| 16 | Plant refuse collecting conveyor | conveyor | 2,940,000 | 0.55 | 0.26 | 0.040 | 2 | 90% enclosure | 90.0% | 0.055 | 0.026 | 0.0040 | 500 | 0.229 | no | NA |
| 17 | Reject bunker | stockpile* | | | | | | | | | | | | | | |
| 18 | Refuse truck bin mass flow gate/bin bypass to reject bunker | drop | 2,940,000 | 0.554 | 0.262 | 0.040 | 2 | 90% enclosure | 90.0% | 0.0554 | 0.0262 | 0.0040 | 500 | 0.229 | no | NA |
| 19 | Stoker collecting conveyor | conveyor | 150,000 | 0.057 | 0.027 | 0.004 | 2 | 90% enclosure | 90.0% | 0.0057 | 0.0027 | 0.00040 | 500 | 0.229 | no | NA |
| 20 | Stoker bin mass flow gate and weigh belt | drop | 75,000 | 0.014 | 0.007 | 0.001 | 2 | none | 0.0% | 0.0141 | 0.0067 | 0.0010 | 500 | 0.229 | no | NA |
| 20a | Stoker Conveyor from stoker bin | conveyor | 225,000 | 0.042 | 0.020 | 0.003 | 2 | 90% enclosure | 90.0% | 0.0042 | 0.002005 | 0.000304 | 500 | 0.229 | no | NA |
| 20b | Stoker Conveyor # 2 from stoker bin | conveyor | 225,000 | 0.042 | 0.020 | 0.003 | 2 | 90% enclosure | 90.0% | 0.0042 | 0.002005 | 0.000304 | 500 | 0.229 | no | NA |
| 20c | Stoker Stockpile | stockpile* | | | | | | | | | | | | | | |
| 21 | Plantmen coal conveyor | conveyor | 9,220,000 | 1.74 | 0.82 | 0.124 | 2 | 90% enclosure | 90.0% | 0.1737 | 0.0822 | 0.0124 | 1600 | 0.7335 | yes | 83.627 |
| 22 | No. 4 clean coal stacking tube | drop | 4,610,000 | 0.87 | 0.41 | 0.062 | 2 | none | 0.0% | 0.8687 | 0.4109 | 0.0622 | 1600 | 0.7335 | yes | 83.627 |
| 23 | No. 4 clean coal stockpile | stockpile* | | | | | | | | | | | | | | |
| 24 | Clean coal stacking tube transfer conveyor | conveyor | 4,610,000 | 0.87 | 0.41 | 0.062 | 2 | 90% enclosure | 90.0% | 0.087 | 0.041 | 0.0062 | 1500 | 0.687 | yes | 82.951 |
| 25 | No. 3 clean coal stacking tube | drop | 4,610,000 | 0.87 | 0.41 | 0.062 | 2 | none | 0.0% | 0.869 | 0.411 | 0.0622 | 1500 | 0.687 | yes | 82.951 |
| 26 | No. 3 clean coal stockpile | stockpile* | | | | | | | | | | | | | | |
| 27 | Clean coal loadout conveyor No. 1 | conveyor | 11,344,315 | 2.14 | 1.01 | 0.153 | 2 | 95% - water mister, 90% enclosure | 99.5% | 0.0107 | 0.0051 | 0.0008 | 4000 | 1.833 | yes | 96.959 |
| 28 | Clean coal loadout conveyor No. 2 | conveyor | 10,883,315 | 2.05 | 0.97 | 0.147 | 2 | 95% - water mister, 90% enclosure | 99.5% | 0.0103 | 0.0048 | 0.0007 | 4000 | 1.833 | yes | 96.959 |
| 29 | Train loadout hopper to train (inner and outer loops) | drop | 10,883,315 | 2.05 | 0.97 | 0.147 | 2 | 95% - water mister | 95.0% | 0.1025 | 0.0485 | 0.0073 | 4000 | 1.833 | yes | 96.959 |
| 30 | Industrial steam coal conveyor | conveyor | 461,000 | 0.09 | 0.04 | 0.006 | 2 | 95% - water mister, 90% enclosure | 99.5% | 0.00043 | 0.00021 | 0.00003 | 4000 | 1.833 | yes | 96.959 |
| 31 | Industrial steam coal stockpile | stockpile* | | | | | | | | | | | | | | |
| **Dry Crush Circuit** | | | | | | | | | | | | | | | | |
| 32 | Run of mine coal stockpile | stockpile* | | | | | | | | | | | | | | |
| 33 | Run of mine coal truck dump to feeder | drop | 1,918,500 | 0.44 | 0.21 | 0.031 | 1 | none | 0.0% | 0.4397 | 0.2079 | 0.0315 | 2000 | 0.917 | yes | 86.904 |
| 34 | Feeder to run of mine conveyor | conveyor | 1,918,500 | 0.44 | 0.21 | 0.031 | 1 | none | 0.0% | 0.4397 | 0.2079 | 0.0315 | 2000 | 0.917 | yes | 86.904 |
| 35 | Run of mine conveyor | conveyor | 1,918,500 | 0.44 | 0.21 | 0.031 | 1 | 90% enclosure | 90.0% | 0.0440 | 0.0208 | 0.0031 | 2000 | 0.917 | yes | 86.904 |
| 36 | Scalping screen | screen | 1,918,500 | 2.11 | 0.71 | 0.05 | 3 | none | 0.0% | 2.1104 | 0.7098 | 0.0480 | 2000 | 0.917 | yes | 86.904 |
| 37 | Rotary breaker | rotary breaker | 1,918,500 | 1.15 | 0.52 | 0.10 | 3 | none | 0.0% | 1.1511 | 0.5186 | 0.0959 | 2000 | 0.917 | yes | 86.904 |
| 38 | Breaker collecting conveyor | conveyor | 1,699,315 | 0.4363 | 0.2059 | 0.0312 | 1 | 90% enclosure | 90.0% | 0.043629 | 0.020587 | 0.003117 | 2000 | 0.917 | yes | 86.904 |
| 39 | Coarse coal conveyor | conveyor | 10,185 | 0.0044 | 0.0021 | 0.0003 | 1 | 90% enclosure | 90.0% | 0.000440 | 0.000208 | 0.000031 | 2000 | 0.917 | yes | 86.904 |
| 40 | Coarse coal stockpile | stockpile* | | | | | | | | | | | | | | |
| 41 | Crusher | crusher | 1,699,315 | 1.14 | 0.51 | 0.09 | 3 | none | 0.0% | 1.1398 | 0.5128 | 0.0850 | 2000 | 0.917 | yes | 86.904 |
| 42 | Dry crush coal conveyor | conveyor | 1,699,315 | 0.44 | 0.21 | 0.031 | 1 | 90% enclosure | 90.0% | 0.0435 | 0.0206 | 0.0031 | 2000 | 0.917 | yes | 86.904 |
| 43 | Dry crush coal stockpile | stockpile* | | | | | | | | | | | | | | |
| **Dry Stoker Circuit** | | | | | | | | | | | | | | | | |
| 44 | Feeder bin | drop | 400,000 | 0.0917 | 0.0434 | 0.00657 | 1 | none | 0.0% | 0.09167 | 0.04336 | 0.00657 | 400 | 0.183 | no | NA |
| 45 | Feeder to coal conveyor | drop | 400,000 | 0.0917 | 0.0434 | 0.00657 | 1 | none | 0.0% | 0.09167 | 0.04336 | 0.00657 | 400 | 0.183 | no | NA |
| 46 | Coal conveyor | conveyor | 400,000 | 0.0917 | 0.0434 | 0.00657 | 1 | none | 0.0% | 0.09167 | 0.04336 | 0.00657 | 400 | 0.183 | no | NA |
| 51 | Secondary screen | screen | 400,000 | 0.4400 | 0.1480 | 0.01000 | 3 | none | 0.0% | 0.44000 | 0.14800 | 0.01000 | 400 | 0.183 | no | NA |
| 50 | Collecting coal conveyor | conveyor | 400,000 | 0.0917 | 0.0434 | 0.00657 | 1 | none | 0.0% | 0.09167 | 0.04336 | 0.00657 | 400 | 0.183 | no | NA |
| 52 | Oversize (slicker) coal slacker conveyor | conveyor | 240,000 | 0.0550 | 0.0260 | 0.00394 | 1 | none | 0.0% | 0.05500 | 0.02601 | 0.00394 | 400 | 0.183 | no | NA |
| 53 | Oversize (slicker) coal stockpile | stockpile* | | | | | | | | | | | | | | |
| 54 | Fines coal slacker conveyor | conveyor | 160,050 | 0.0367 | 0.0173 | 0.00263 | 1 | none | 0.0% | 0.03667 | 0.01734 | 0.00263 | 400 | 0.183 | no | NA |
| 55 | Fines coal stockpile | stockpile* | | | | | | | | | | | | | | |
| **Roadways** | | | | | | | | | | | | | | | | |
| 56 | Preparation plant and coal yard roads | roads* | | | | | | | | | | | | | | |
| | | | Totals | 53.84 | 27.50 | 3.82 | | | | 10.44 | 4.42 | 0.62 | | | | |

**Methodology**
*Coal Preparation Plant Stockpile Emissions found on Coal Preparation Plant Material Storage Piles page.
**Unpaved Road Emissions found on Unpaved Roads pages.
Maximum Annual Throughput (tons/year) based on worst case production from the coal mine and anticipated breakdown in process according to material composition/characteristics
Uncontrolled PTE (tons/yr) = (Maximum Material Handling Throughput (tons/yr)) * (Emission Factor (lb/ton)) * (ton/2000 lbs)
Controlled PTE (tons/yr) = (Uncontrolled PTE (tons/yr)) * (1 - Control Efficiency)
For process weight rates in excess of 60,000 lbs/hr (30 tons/hr), 326 IAC 6-3-2 Allowable Particulate Emission Rate (lbs/hour) = 55 * [Maximum Process Weight Rate (tons/hour)]^(0.11) - 40

**Sources for Emission Factors**
1. From AP-42 Section 13.2.4.3 formula using minimum coal moisture content of 10.0%, and worst case annual mean wind speed of 8 miles/hour
2. From AP-42 Section 13.2.4.3 formula using minimum coal moisture content of 11.5%, and worst case annual mean wind speed of 8 miles/hour
3. From AP-42 Section 11.19.2, Table 11.19.2-2.

**Abbreviations**
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate matter (< 2.5 um)
PTE = Potential to Emit
NA = Not Applicable

**Attachment A: Emissions Calculations**
**Coal Preparation/Processing Plant Material Storage Piles (fugitive)**

**Company Name:** Peabody Midwest Mining LLC - Bear Run Mine
**Source Address:** 7255 East CR 600 South, Carlisle, IN 47838
**Minor Source Operating Permit No.:** M153-28491-00011
**Notice-Only Change No.:** 153-30273-00011
**Permit Reviewer:** Nathan C. Bell

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (Pre 1983 Edition), Section 11.2.3.

Ef = 1.7*(s/1.5)*(365-p)/235*(f/15)
where Ef = emission factor (lb/acre/day)
s = silt content (wt %)
p = 125 days of rain greater than or equal to 0.01 inches
f = 15 % of wind greater than or equal to 12 mph

| Material Storage Pile | Stockpile ID | Silt Content (wt %)* | Emission Factor (lb/acre/day) | Maximum Anticipated Pile Size (acres)** | Uncontrolled PTE of PM (tons/yr) | Uncontrolled PTE of PM10/PM2.5 (tons/yr) |
|---|---|---|---|---|---|---|
| Process Circuit run of mine coal pile | 1 | 6.2 | 7.18 | 3.40 | 4.453 | 1.558 |
| Process Circuit breaker reject bunker (rock)*** | 8 | 1.6 | 1.85 | 0.01 | 0.003 | 0.001 |
| Process Circuit No. 2 raw coal pile | 11 | 6.2 | 7.18 | 1.55 | 2.030 | 0.710 |
| Process Circuit No. 1 raw coal pile | 14 | 6.2 | 7.18 | 1.55 | 2.030 | 0.710 |
| Process Circuit reject bunker (rock)*** | 17 | 1.6 | 1.85 | 0.01 | 0.003 | 0.001 |
| Stoker Coal Stockpile | 20c | 6.2 | 7.18 | 0.50 | 0.655 | 0.229 |
| Process Circuit No. 4 clean coal pile**** | 23 | 2.2 | 2.55 | 2.90 | 1.348 | 0.472 |
| Process Circuit No. 3 clean coal pile**** | 26 | 2.2 | 2.55 | 2.20 | 1.022 | 0.358 |
| Dry Crush Circuit direct ship coal pile | 43 | 6.2 | 7.18 | 1.40 | 1.834 | 0.642 |
| Process Circuit industrial steam coal pile**** | 31 | 2.2 | 2.55 | 0.50 | 0.232 | 0.081 |
| Dry Crush Circuit & Dry Stoker Circuit run of mine coal pile | 32 | 6.2 | 7.18 | 0.60 | 0.786 | 0.275 |
| Dry Crush Circuit reject rock pile*** | 40 | 1.6 | 1.85 | 0.01 | 0.003 | 0.001 |
| Dry Stoker Circuit oversize (stoker) coal pile | 53 | 6.2 | 7.18 | 0.01 | 0.013 | 0.005 |
| Dry Stoker Circuit fines coal pile | 55 | 6.2 | 7.18 | 0.01 | 0.013 | 0.005 |
| | | | | **Totals** | **14.43** | **5.05** |

**Methodology**
*Silt content values obtained from AP-42 Table 13.2.4-1 (dated 1/95)
**Maximum anticipated pile size (acres) provided by the source.
***Assuming reject material is similar to crushed limestone
****Assuming clean coal is similar to coal as received by power plant
Uncontrolled PTE of PM (tons/yr) = (Emission Factor (lb/acre/day)) * (Maximum Pile Size (acres)) * (ton/2000 lbs) * (8760 hours/yr)
Uncontrolled PTE of PM10/PM2.5 (tons/yr) = (Potential PM Emissions (tons/yr)) * 35%
Controlled PTE (tons/yr) = (Uncontrolled PTE (tons/yr)) * (1 - Dust Control Efficiency)

**Abbreviations**
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PM2.5 = PM10
PTE = Potential to Emit

Company Name: Peabody Midwest Mining LLC - Bear Run Mine
Source Address: 7255 East CR 600 South, Carlisle, IN 47838
Minor Source Operating Permit No.: M153-28491-00011
Notice-Only Change No.: 153-30273-00011
Permit Reviewer: Nathan C. Bell

## Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

Maximum Raw Coal Receiving Capacity to plant = 14,000,000 tons/yr
Maximum Material Handling Capacity by Front-end Loader = 3,500,000 tons/yr (25% handled by front-end loaders; 75% directly dumped into process feeder bins)
Maximum Raw Coal Receiving Capacity to Dry Crush/Dry Stoker Circuits = 1,918,500
Maximum Material Handling Capacity by Front-end Loader = 479,625 tons/yr (25% handled by front-end loaders; 75% directly dumped into process feeder bins)
Maximum Refuse Shipping Capacity by Truck = 3,360,000 tons/yr
Maximum Coal Shipping Capacity by Truck = 536,000 tons/yr (5% of coal will be shipped by truck; 95% of coal will be shipped by rail)

| Process | Vehicle Type | Maximum Weight of Vehicle (tons) | Maximum Weight of Load (tons) | Maximum Weight of Vehicle and Load (tons/trip) | Maximum trips per year (trip/yr) | Total Weight driven per year (ton/yr) | Maximum one-way distance (feet/trip) | Maximum one-way distance (mi/trip) | Maximum one-way miles (miles/yr) |
|---|---|---|---|---|---|---|---|---|---|
| Coal Mine Truck to Plant Enter Full | Dump truck (200 ton load) | 107.5 | 167.5 | 275.0 | 8.4E+04 | 2.3E+07 | 560 | 0.106 | 8864.8 |
| Coal Mine Truck Leave Plant Empty | Dump truck (200 ton load) | 107.5 | 0 | 107.5 | 8.4E+04 | 9.0E+06 | 560 | 0.106 | 8864.8 |
| Front-end Loader Full | Front-end loader (3 CY) | 105.0 | 24.0 | 129.0 | 1.5E+05 | 1.9E+07 | 200 | 0.038 | 5524.0 |
| Front-end Loader Empty | Front-end loader (3 CY) | 105.0 | 0 | 105.0 | 1.5E+05 | 1.5E+07 | 200 | 0.038 | 5524.0 |
| Coal Mine Truck Dry Crush/Dry Stoker Circuits Enter Full | Dump truck (200 ton load) | 107.5 | 167.5 | 275.0 | 1.1E+04 | 3.1E+06 | 1230 | 0.233 | 2668.2 |
| Coal Mine Truck Leave Dry Crush/Dry Stoker Circuits Empty | Dump truck (200 ton load) | 107.5 | 0 | 107.5 | 1.1E+04 | 1.2E+06 | 1230 | 0.233 | 2668.2 |
| Front-end Loader Full | Front-end loader (3 CY) | 105.0 | 24.0 | 129.0 | 2.0E+04 | 2.6E+06 | 200 | 0.038 | 757.0 |
| Front-end Loader Empty | Front-end loader (3 CY) | 105.0 | 0 | 105.0 | 2.0E+04 | 2.1E+06 | 200 | 0.038 | 757.0 |
| Refuse Transport Truck Leave Full | Dump truck (200 ton load) | 107.5 | 167.5 | 275.0 | 2.0E+04 | 5.5E+06 | 527 | 0.100 | 2002.2 |
| Refuse Transport Truck Enter Empty | Dump truck (200 ton load) | 107.5 | 0 | 107.5 | 2.0E+04 | 2.2E+06 | 1087 | 0.206 | 4129.7 |
| Coal Transport Truck Leave Full | Freight Truck (6 axles) | 15.0 | 40.0 | 55.0 | 1.3E+04 | 7.4E+05 | 1430 | 0.271 | 3629.2 |
| Coal Transport Truck Enter Empty | Freight Truck (6 axles) | 15.0 | 0 | 15.0 | 1.3E+04 | 2.0E+05 | 1070 | 0.203 | 2715.5 |
| | Total | | | | 5.9E+05 | 8.4E+07 | | | 4.8E+04 |

Average Vehicle Weight Per Trip = 142.3 tons/trip
Average Miles Per Trip = 0.082 miles/trip

Unmitigated Emission Factor, Ef = k*[(s/12)^a]*[(W/3)^b] (Equation 1a from AP-42 13.2.2)

| | PM | PM10 | PM2.5 | |
|---|---|---|---|---|
| where k = | 4.9 | 1.5 | 0.15 | lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads) |
| s = | 5.1 | 5.1 | 5.1 | % = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Coal Mine Plant Road) |
| a = | 0.7 | 0.9 | 0.9 | = constant (AP-42 Table 13.2.2-2) |
| W = | 142.3 | 142.3 | 142.3 | tons = average vehicle weight (provided by source) |
| b = | 0.45 | 0.45 | 0.45 | = constant (AP-42 Table 13.2.2-2) |

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365]
Mitigated Emission Factor, Eext = E * [(365 - P)/365]
where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

| | PM | PM10 | PM2.5 | |
|---|---|---|---|---|
| Unmitigated Emission Factor, Ef = | 15.29 | 3.94 | 0.39 | lb/mile |
| Mitigated Emission Factor, Eext = | 10.05 | 2.59 | 0.26 | lb/mile |
| Dust Control Efficiency = | 50% | 50% | 50% | (pursuant to control measures outlined in fugitive dust control plan) |

| Process | Vehicle Type | Unmitigated PTE of PM (tons/yr) | Unmitigated PTE of PM10 (tons/yr) | Unmitigated PTE of PM2.5 (tons/yr) | Mitigated PTE of PM (tons/yr) | Mitigated PTE of PM10 (tons/yr) | Mitigated PTE of PM2.5 (tons/yr) | Controlled PTE of PM (tons/yr) | Controlled PTE of PM10 (tons/yr) | Controlled PTE of PM2.5 (tons/yr) |
|---|---|---|---|---|---|---|---|---|---|---|
| Coal Mine Truck to Plant Enter Full | Dump truck (200 ton load) | 67.76 | 17.48 | 1.75 | 44.55 | 11.49 | 1.15 | 22.28 | 5.75 | 0.57 |
| Coal Mine Truck Leave Plant Empty | Dump truck (200 ton load) | 67.76 | 17.48 | 1.75 | 44.55 | 11.49 | 1.15 | 22.28 | 5.75 | 0.57 |
| Front-end Loader Full | Front-end loader (3 CY) | 42.22 | 10.89 | 1.09 | 27.76 | 7.16 | 0.72 | 13.88 | 3.58 | 0.36 |
| Front-end Loader Empty | Front-end loader (3 CY) | 42.22 | 10.89 | 1.09 | 27.76 | 7.16 | 0.72 | 13.88 | 3.58 | 0.36 |
| Coal Mine Truck Dry Crush/Dry Stoker Circuits Enter Full | Dump truck (200 ton load) | 20.39 | 5.26 | 0.53 | 13.41 | 3.46 | 0.35 | 6.70 | 1.73 | 0.17 |
| Coal Mine Truck Leave Dry Crush/Dry Stoker Circuits Empty | Dump truck (200 ton load) | 20.39 | 5.26 | 0.53 | 13.41 | 3.46 | 0.35 | 6.70 | 1.73 | 0.17 |
| Front-end Loader Full | Front-end loader (3 CY) | 5.79 | 1.49 | 0.15 | 3.80 | 0.98 | 0.10 | 1.90 | 0.49 | 0.05 |
| Front-end Loader Empty | Front-end loader (3 CY) | 5.79 | 1.49 | 0.15 | 3.80 | 0.98 | 0.10 | 1.90 | 0.49 | 0.05 |
| Refuse Transport Truck Leave Full | Dump truck (16 CY) | 15.30 | 3.95 | 0.39 | 10.06 | 2.60 | 0.26 | 5.03 | 1.30 | 0.13 |
| Refuse Transport Truck Enter Empty | Dump truck (16 CY) | 31.56 | 8.14 | 0.81 | 20.75 | 5.35 | 0.54 | 10.38 | 2.68 | 0.27 |
| Coal Transport Truck Leave Full | Freight Truck (6 axles) | 27.74 | 7.16 | 0.72 | 18.24 | 4.71 | 0.47 | 9.12 | 2.35 | 0.24 |
| Coal Transport Truck Enter Empty | Freight Truck (6 axles) | 20.76 | 5.35 | 0.54 | 13.65 | 3.52 | 0.35 | 6.82 | 1.76 | 0.18 |
| | Totals | 367.65 | 94.65 | 9.49 | 241.76 | 62.37 | 6.24 | 120.88 | 31.18 | 3.12 |

**Methodology**
Maximum Weight of Vehicle and Load (tons/trip) = [Maximum Weight of Vehicle (tons/trip)] + [Maximum Weight of Load (tons/trip)]
Maximum trips per year (trip/yr) = [Maximum Capacity (tons/yr)] / [Maximum Weight of Load (tons/trip)]
Total Weight driven per year (ton/yr) = [Maximum Weight of Vehicle and Load (tons/trip)] * [Maximum trips per year (trip/yr)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per year (trip/yr)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * (1 - Dust Control Efficiency)

**Abbreviations**
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PM2.5 = PM10
PTE = Potential to Emit

**Attachment A: Emissions Calculations**
**Coal Mining (fugitive)**



**Company Name:** **Peabody Midwest Mining LLC - Bear Run Mine**
**Source Address:** **7255 East CR 600 South, Carlisle, IN 47838**
**Minor Source Operating Permit No.:** **M153-28491-00011**
**Notice-Only Change No.:** **153-30273-00011**
**Permit Reviewer:** **Nathan C. Bell**

The following calculations determine the amount of emissions created by mining activities at the coal mine, based on 8,760 hours of use and USEPA's AP-42 Section 11.9 for Western Surface Coal Mining

Blasting Emission Factor

$Ef = 0.000014(A)^{1.5}$

where Ef = emission factor (lb/blast)

A = 30193 horizontal area (ft2), with blasting depth less than or equal to 70 ft

Ef = 73.4 lb/blast

| Process | Maximum Capacity (for 8,760 hours/year) | | PM Emission Factor | Scaling Factor for PM10 | Scaling Factor for PM2.5 | PTE of PM (tons/year) | PTE of PM10 (tons/year) | PTE of PM2.5 (tons/year) |
|---|---|---|---|---|---|---|---|---|
| Drilling | 84,453 | holes/yr | 1.3 lb/hole | 0.52 | 0.03 | 54.89 | 28.55 | 1.65 |
| Blasting | 1,141 | blasts/yr | 73.4 lb/blast | 0.52 | 0.03 | 41.91 | 21.79 | 1.26 |
| Topsoil Removal | 1,494,722 | tons/yr | 0.058 lb/ton | 0.52 | 0.03 | 43.35 | 22.54 | 1.30 |
| Loading Overburden (T/S) | 92,316,979 | tons/yr | 0.037 lb/ton | 0.52 | 0.03 | 1707.86 | 888.09 | 51.24 |
| Loading Overburden (D/L) | 142,863,320 | tons/yr | 0.037 lb/ton | 0.52 | 0.03 | 2642.97 | 1374.35 | 79.29 |
| Unloading Overburden (T/S) | 92,316,979 | tons/yr | 0.002 lb/ton | 0.52 | 0.03 | 92.32 | 48.00 | 2.77 |
| Unloading Overburden (D/L) | 142,863,320 | tons/yr | 0.002 lb/ton | 0.52 | 0.03 | 142.86 | 74.29 | 4.29 |
| Loading Coal | 15,918,500 | tons/yr | 0.028 lb/ton | 0.52 | 0.03 | 222.86 | 115.89 | 6.69 |
| | | | | | **Total** | **4949.03** | **2573.49** | **148.47** |

**Methodology**
Uncontrolled PTE (tons/yr) = (Maximum Capacity (units/yr)) * (Emission Factor (lb/unit)) * (ton/2000 lbs)
Emission factors from AP-42 Section 11.9 for Western Surface Coal Mining
*Scaling Factors for PM10 and PM2.5 assumed equal to those for blasting

**Abbreviations**
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PM2.5 = PM10
PTE = Potential to Emit

**Attachment A: Emissions Calculations**
**Coal Mine Storage Piles (fugitive)**



**Company Name:** Peabody Midwest Mining LLC - Bear Run Mine
**Source Address:** 7255 East CR 600 South, Carlisle, IN 47838
**Minor Source Operating Permit No.:** M153-28491-00011
**Notice-Only Change No.:** 153-30273-00011
**Permit Reviewer:** Nathan C. Bell

The following calculations determine the amount of emissions created by wind erosion of storage stockpiles, based on 8,760 hours of use and USEPA's AP-42 (Pre 1983 Edition), Section 11.2.3.

Ef = 1.7*(s/1.5)*(365-p)/235*(f/15)
where Ef = emission factor (lb/acre/day)
s = silt content (wt %)
p = 125 days of rain greater than or equal to 0.01 inches
f = 15 % of wind greater than or equal to 12 mph

| Material Storage Pile | Silt Content (wt %)* | Emission Factor (lb/acre/day) | Maximum Anticipated Pile Size (acres)** | PTE of PM (tons/yr) | PTE of PM10/PM2.5 (tons/yr) |
|---|---|---|---|---|---|
| Topsoil and subsoil piles*** | 7.5 | 8.68 | 1.00 | 1.584 | 0.554 |
| Overburden spoil piles | 7.5 | 8.68 | 14.00 | 22.180 | 7.763 |
| Raw coal piles | 6.2 | 7.18 | 1.00 | 1.310 | 0.458 |
| | | | **Totals** | **25.07** | **8.78** |

**Methodology**
PTE of PM (tons/yr) = (Emission Factor (lb/acre/day)) * (Maximum Pile Size (acres)) * (ton/2000 lbs) * (8760 hours/yr)
PTE of PM10/PM2.5 (tons/yr) = (Potential PM Emissions (tons/yr)) * 35%
*Silt content values obtained from AP-42 Table 13.2.4-1 (dated 1/95)
**Maximum anticipated pile size (acres) provided by the source. Overburden spoils piles land area assumed to be 3000 ft long by 200 ft wide.
***Assuming topsoil and subsoil are similar to overburden

**Abbreviations**
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PM2.5 = PM10
PTE = Potential to Emit

**Attachment A: Emissions Calculations**
**Coal Mine Unpaved Roads (fugitive)**

**Company Name: Peabody Midwest Mining LLC - Bear Run Mine**
**Source Address: 7255 East CR 600 South, Carlisle, IN 47838**
**Minor Source Operating Permit No.: M153-28491-00011**
**Notice-Only Change No.: 153-30273-00011**
**Permit Reviewer: Nathan C. Bell**

## Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

| | North Pit and South Pit Combined | Anticipated Breakdown: North Pit 60.0% | South Pit 40.0% | |
|---|---|---|---|---|
| Maximum Raw Coal Shipping Capacity = | 14,000,000 | 8,400,000 | 5,600,000 | tons/yr |
| Maximum Refuse Shipping Capacity by Truck = | 3,360,000 | 2,016,000 | 1,344,000 | |
| Maximum Raw Coal Shipping to Dry Crush/Dry Stoker Circuits = | 1,918,500 | 1,151,100 | 767,400 | |
| Maximum Overburden Transport Capacity = | 92,316,979 | 55,390,187 | 36,926,792 | tons/yr |
| Maximum Topsoil and Subsoil Transport Capacity = | 1,494,722 | 896,833 | 597,889 | tons/yr |

| Location | Process | Vehicle Type | Maximum Weight of Vehicle (tons) | Maximum Weight of Load (tons) | Maximum Weight of Vehicle and Load (tons/trip) | Maximum trips per year (trip/yr) | Total Weight driven per year (ton/yr) | Maximum one-way distance (feet/trip) | Maximum one-way distance (mi/trip) | Maximum one-way miles (miles/yr) |
|---|---|---|---|---|---|---|---|---|---|---|
| North Pit | Coal Mine Truck Leave Full to Plant | Dump truck (200 ton load) | 107.5 | 167.5 | 275.0 | 5.0E+04 | 1.4E+07 | 8820 | 1.670 | 83772.0 |
| | Coal Mine Truck Enter Empty from Plant | Dump truck (200 ton load) | 107.5 | 0 | 107.5 | 5.0E+04 | 5.4E+06 | 8820 | 1.670 | 83772.0 |
| | Refuse Transport Truck Leave Empty to Plant | Dump truck (200 ton load) | 107.5 | 0 | 107.5 | 1.2E+04 | 1.3E+06 | 1720 | 0.326 | 3920.8 |
| | Refuse Transport Truck Enter Full from Plant | Dump truck (200 ton load) | 107.5 | 167.5 | 275.0 | 1.2E+04 | 3.3E+06 | 10540 | 1.996 | 24026.1 |
| | Coal Mine Truck Leave Full to Dry Crush/Dry Stoker Circuits | Dump truck (200 ton load) | 107.5 | 167.5 | 275.0 | 6.9E+03 | 1.9E+06 | 6420 | 1.216 | 8356.0 |
| | Coal Mine Truck Enter Empty from Dry Crush/Dry Stoker Circuits | Dump truck (200 ton load) | 107.5 | 0 | 107.5 | 6.9E+03 | 7.4E+05 | 6420 | 1.216 | 8356.0 |
| | Overburden Truck Leave Full | Dump truck (200 ton load) | 150.0 | 240.0 | 390.0 | 2.3E+05 | 9.0E+07 | 2000 | 0.379 | 87421.4 |
| | Overburden Truck Enter Empty | Dump truck (200 ton load) | 150.0 | 0 | 150.0 | 2.3E+05 | 3.5E+07 | 2000 | 0.379 | 87421.4 |
| | Topsoil and Subsoil Truck Leave Full | Dump truck (200 ton load) | 150.0 | 240.0 | 390.0 | 3.7E+03 | 1.5E+06 | 3000 | 0.568 | 2123.2 |
| | Topsoil and Subsoil Truck Enter Empty | Dump truck (200 ton load) | 150.0 | 0 | 150.0 | 3.7E+03 | 5.5E+05 | 3000 | 0.568 | 2123.2 |
| South Pit | Coal Mine Truck Leave Full to Plant | Dump truck (200 ton load) | 107.5 | 167.5 | 275.0 | 3.3E+04 | 9.2E+06 | 25804 | 5.077 | 169722.3 |
| | Coal Mine Truck Enter Empty from Plant | Dump truck (200 ton load) | 107.5 | 0 | 107.5 | 3.3E+04 | 3.6E+06 | 25804 | 5.077 | 169722.3 |
| | Refuse Transport Truck Leave Empty to Plant | Dump truck (200 ton load) | 107.5 | 0 | 107.5 | 8.0E+03 | 8.6E+05 | 1720 | 0.326 | 2619.8 |
| | Refuse Transport Truck Enter Full from Plant | Dump truck (200 ton load) | 107.5 | 167.5 | 275.0 | 8.0E+03 | 2.2E+06 | 27102 | 5.133 | 41186.2 |
| | Coal Mine Truck Leave Full to Dry Crush/Dry Stoker Circuits | Dump truck (200 ton load) | 107.5 | 167.5 | 275.0 | 4.6E+03 | 1.3E+06 | 29206 | 5.531 | 25342.2 |
| | Coal Mine Truck Enter Empty from Dry Crush/Dry Stoker Circuits | Dump truck (200 ton load) | 107.5 | 0 | 107.5 | 4.6E+03 | 4.9E+05 | 29206 | 5.531 | 25342.2 |
| | Overburden Truck Leave Full | Dump truck (240 ton load) | 162.0 | 240.0 | 402.0 | 1.5E+05 | 6.2E+07 | 2000 | 0.379 | 58280.9 |
| | Overburden Truck Enter Empty | Dump truck (240 ton load) | 162.0 | 0 | 162.0 | 1.5E+05 | 2.5E+07 | 2000 | 0.379 | 58280.9 |
| | Topsoil and Subsoil Truck Leave Full | Dump truck (240 ton load) | 162.0 | 240.0 | 402.0 | 2.5E+03 | 1.0E+06 | 3000 | 0.568 | 1415.5 |
| | Topsoil and Subsoil Truck Enter Empty | Dump truck (240 ton load) | 162.0 | 0 | 162.0 | 2.5E+03 | 4.0E+05 | 3000 | 0.568 | 1415.5 |
| | | **Total** | | | | **1.0E+06** | **2.6E+08** | | | **9.4E+05** |

Average Vehicle Weight Per Trip = 255.8 tons/trip
Average Miles Per Trip = 0.933 miles/trip

Unmitigated Emission Factor, Ef = k*(s/12)^a*[(W/3)^b] (Equation 1a from AP-42 13.2.2)

| | PM | PM10 | PM2.5 | |
|---|---|---|---|---|
| where k = | 4.9 | 1.5 | 0.15 | lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads) |
| s = | 5.1 | 5.1 | 5.1 | % = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Coal Mine Plant Road) |
| a = | 0.7 | 0.9 | 0.9 | = constant (AP-42 Table 13.2.2-2) |
| W = | 255.8 | 255.8 | 255.8 | tons = average vehicle weight (provided by source) |
| b = | 0.45 | 0.45 | 0.45 | = constant (AP-42 Table 13.2.2-2) |

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365]
Mitigated Emission Factor, Eext = E * [(365 - P)/365]
where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

| | PM | PM10 | PM2.5 | |
|---|---|---|---|---|
| Unmitigated Emission Factor, Ef = | 19.90 | 5.13 | 0.51 | lb/mile |
| Mitigated Emission Factor, Eext = | 13.09 | 3.38 | 0.34 | lb/mile |
| Dust Control Efficiency = | 50% | 50% | 50% | (pursuant to control measures outlined in fugitive dust control plan) |

| Location | Process | Vehicle Type | Unmitigated PTE of PM (tons/yr) | Unmitigated PTE of PM10 (tons/yr) | Unmitigated PTE of PM2.5 (tons/yr) | Mitigated PTE of PM (tons/yr) | Mitigated PTE of PM10 (tons/yr) | Mitigated PTE of PM2.5 (tons/yr) | Controlled PTE of PM (tons/yr) | Controlled PTE of PM10 (tons/yr) | Controlled PTE of PM2.5 (tons/yr) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| North Pit | Coal Mine Truck Leave Full to Plant | Dump truck (200 ton load) | 833.66 | 215.06 | 21.51 | 548.15 | 141.41 | 14.14 | 274.08 | 70.70 | 7.07 |
| | Coal Mine Truck Enter Empty from Plant | Dump truck (200 ton load) | 833.66 | 215.06 | 21.51 | 548.15 | 141.41 | 14.14 | 274.08 | 70.70 | 7.07 |
| | Refuse Transport Truck Leave Empty to Plant | Dump truck (200 ton load) | 39.02 | 10.07 | 1.01 | 25.66 | 6.62 | 0.66 | 12.83 | 3.31 | 0.33 |
| | Refuse Transport Truck Enter Full from Plant | Dump truck (200 ton load) | 239.09 | 61.68 | 6.17 | 157.21 | 40.56 | 4.06 | 78.61 | 20.28 | 2.03 |
| | Coal Mine Truck Leave Full to Dry Crush/Dry Stoker Circuits | Dump truck (200 ton load) | 83.15 | 21.45 | 2.15 | 54.68 | 14.11 | 1.41 | 27.34 | 7.05 | 0.71 |
| | Coal Mine Truck Enter Empty from Dry Crush/Dry Stoker Circuits | Dump truck (200 ton load) | 83.15 | 21.45 | 2.15 | 54.68 | 14.11 | 1.41 | 27.34 | 7.05 | 0.71 |
| | Overburden Truck Leave Full | Dump truck (200 ton load) | 869.97 | 224.43 | 22.44 | 572.03 | 147.57 | 14.76 | 286.02 | 73.78 | 7.38 |
| | Overburden Truck Enter Empty | Dump truck (200 ton load) | 869.97 | 224.43 | 22.44 | 572.03 | 147.57 | 14.76 | 286.02 | 73.78 | 7.38 |
| | Topsoil and Subsoil Truck Leave Full | Dump truck (200 ton load) | 21.13 | 5.45 | 0.55 | 13.89 | 3.58 | 0.36 | 6.95 | 1.79 | 0.18 |
| | Topsoil and Subsoil Truck Enter Empty | Dump truck (200 ton load) | 21.13 | 5.45 | 0.55 | 13.89 | 3.58 | 0.36 | 6.95 | 1.79 | 0.18 |
| South Pit | Coal Mine Truck Leave Full to Plant | Dump truck (200 ton load) | 1688.98 | 435.71 | 43.57 | 1110.58 | 286.49 | 28.65 | 555.29 | 143.25 | 14.32 |
| | Coal Mine Truck Enter Empty from Plant | Dump truck (200 ton load) | 1688.98 | 435.71 | 43.57 | 1110.58 | 286.49 | 28.65 | 555.29 | 143.25 | 14.32 |
| | Refuse Transport Truck Leave Empty to Plant | Dump truck (200 ton load) | 26.01 | 6.71 | 0.67 | 17.10 | 4.41 | 0.44 | 8.55 | 2.21 | 0.22 |
| | Refuse Transport Truck Enter Full from Plant | Dump truck (200 ton load) | 409.86 | 105.73 | 10.57 | 269.50 | 69.52 | 6.95 | 134.75 | 34.76 | 3.48 |
| | Coal Mine Truck Leave Full to Dry Crush/Dry Stoker Circuits | Dump truck (200 ton load) | 252.19 | 65.08 | 6.51 | 165.82 | 42.78 | 4.28 | 82.91 | 21.39 | 2.14 |
| | Coal Mine Truck Enter Empty from Dry Crush/Dry Stoker Circuits | Dump truck (200 ton load) | 252.19 | 65.08 | 6.51 | 165.82 | 42.78 | 4.28 | 82.91 | 21.39 | 2.14 |
| | Overburden Truck Leave Full | Dump truck (240 ton load) | 578.98 | 149.62 | 14.96 | 381.36 | 98.38 | 9.84 | 190.68 | 49.19 | 4.92 |
| | Overburden Truck Enter Empty | Dump truck (240 ton load) | 578.98 | 149.62 | 14.96 | 381.36 | 98.38 | 9.84 | 190.68 | 49.19 | 4.92 |
| | Topsoil and Subsoil Truck Leave Full | Dump truck (240 ton load) | 14.09 | 3.63 | 0.36 | 9.26 | 2.39 | 0.24 | 4.63 | 1.19 | 0.12 |
| | Topsoil and Subsoil Truck Enter Empty | Dump truck (240 ton load) | 14.09 | 3.63 | 0.36 | 9.26 | 2.39 | 0.24 | 4.63 | 1.19 | 0.12 |
| | | **Totals** | **9400.25** | **2425.00** | **242.50** | **6180.99** | **1594.52** | **159.45** | **3090.49** | **797.26** | **79.73** |

**Methodology**
Maximum Weight of Vehicle and Load (tons/trip) = [Maximum Weight of Vehicle (tons/trip)] + [Maximum Weight of Load (tons/trip)]
Maximum trips per year (trip/yr) = [Maximum Capacity (tons/yr)] / [Maximum Weight of Load (tons/trip)]
Total Weight driven per year (ton/yr) = [Maximum Weight of Vehicle and Load (tons/trip)] * [Maximum trips per year (trip/yr)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/yr) = [Maximum trips per year (trip/yr)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per year (ton/yr)] / SUM[Maximum trips per year (trip/yr)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/yr)] / SUM[Maximum trips per year (trip/yr)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * (Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Controlled PTE (tons/yr) = (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

**Abbreviations**
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PM2.5 = PM10
PTE = Potential to Emit

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*
**Governor**

*Thomas W. Easterly*
**Commissioner**

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
**www.idem.IN.gov**

# Minor Source Operating Permit
# OFFICE OF AIR QUALITY

## Peabody Midwest Mining LLC - Bear Run Mine
## 7255 East CR 600 South
## Carlisle, Indiana 47838

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

| Operation Permit No.: M153-28491-00011 | |
|---|---|
| Original Signed and Issued by:<br><br>Alfred C. Dumaual, Ph. D., Section Chief<br>Permits Branch<br>Office of Air Quality | Issuance Date: August 9, 2010<br><br>Expiration Date: August 9, 2015 |

First Notice-Only Change No. 153-29637-00011, issued October 14, 2010

| Second Notice-Only Change No. 153-30273-00011 | |
|---|---|
| Issued by:<br><br>Alfred C. Dumaual, Ph. D., Section Chief<br>Permits Branch<br>Office of Air Quality | Issuance Date: March 23, 2011<br><br>Expiration Date: August 9, 2015 |

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## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary coal mine collocated with a coal preparation plant.

| | |
|---|---|
| Source Address: | 7255 East CR 600 South, Carlisle, Indiana 47838 |
| General Source Phone Number: | 812-434-8573 |
| SIC Code: | 1221 |
| County Location: | Sullivan |
| Source Location Status: | Attainment for all criteria pollutants |
| Source Status: | Minor Source Operating Permit Program<br>Minor Source, under PSD Rules<br>Minor Source, Section 112 of the Clean Air Act<br>Not 1 of 28 Source Categories |

### A.2 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

(a) one (1) open pit surface coal mining operation, approved for construction in 2005 and approved for increased production in 2010, with a maximum production rate of 15,918,500 tons of raw coal and coal refuse per year, combined, with fugitive emissions emitted to the atmosphere, including the following activities:

(1) two (2) draglines, identified as Bucyrus Erie 2550 and Bucyrus Erie 2570-W, approved for construction and operation at the Bear Run Mine in 2005 and 2010, respectively;

(2) removal and stockpiling of topsoil and subsoil layers using scrapers bulldozers, front-end loaders, haul trucks, and other machinery;

(3) drilling and blasting of the rocky material (overburden) covering the coal seam;

(4) removal and stockpiling of overburden using two (2) draglines, scrapers, bulldozers, front-end loaders, haul trucks, and other machinery;

(5) removal and stockpiling of broken coal using shovels, bulldozers, front-end loaders, haul trucks, and other machinery;

(6) storage piles consisting of topsoil, subsoil, overburden, and/or coal;

(7) loading of broken coal into haul trucks using shovels, front-end loaders, and other machinery;

(8) transport of coal at the coal mine site on unpaved haul roads;

(9) coal mine reclamation activities, including replacement and grading of overburden, subsoil, and topsoil using scrapers, bulldozers, front-end loaders, haul trucks, and other machinery;

(b) transport of coal at the coal preparation and processing plant site on unpaved roads;

(c) one (1) coal preparation and processing plant, constructed in 2010 and approved for increased production in 2010, with a maximum processing rate of 15,918,500 tons of raw coal and coal refuse per year, combined, including the following equipment and activities:

(1) Process Circuit

(A) one (1) raw coal storage pile, identified as Unit 1, exhausting to the atmosphere;

(B) one (1) coal truck unloading station for the Process Circuit, identified as Unit 2, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(C) one (1) feeder bin, identified as Unit 3, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(D) one (1) enclosed raw coal conveyor, identified as Unit 4, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(E) one (1) scalping screen, identified as Unit 5, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(F) one (1) rotary breaker, identified as Unit 6, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(G) one (1) rotary breaker outlet drop to breaker reject storage pile, identified as Unit 7, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(H) one (1) breaker reject storage pile, identified as Unit 8, and exhausting to the atmosphere;

(I) one (1) enclosed raw coal conveyor, identified as Unit 9, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(J) one (1) raw coal stacking tube, identified as Unit 10, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(K) one (1) raw coal storage pile, identified as Unit 11, and exhausting to the atmosphere;

(L) one (1) enclosed raw coal stacking tube transfer conveyor, identified as Unit 12, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(M) one (1) raw coal stacking tube, identified as Unit 13, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(N) one (1) raw coal storage pile, identified as Unit 14, and exhausting to the atmosphere;

(O) one (1) raw coal underground reclaim tunnel and one (1) raw coal conveyor, identified as Unit 15, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(P) one (1) enclosed coal washing and processing unit, identified as Preparation Plant, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(Q) one (1) enclosed coal refuse conveyor, identified as Unit 16, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(R) one (1) reject bunker storage pile, identified as Unit 17, and exhausting to the atmosphere;

(S) one (1) enclosed coal refuse storage bin with truck loadout, identified as Unit 18, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(T) one (1) enclosed stoker coal conveyor, identified as Unit 19, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(U) one (1) stoker coal storage bin with loadout weigh belt, identified as Unit 20, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(V) one (1) enclosed stoker coal conveyor, identified as Unit 20a, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(W) one (1) stoker coal stacking conveyor, identified as Unit 20b, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(X) one (1) stoker coal storage pile, identified as Unit 20c, and exhausting to the atmosphere;

(Y) one (1) enclosed clean coal conveyor, identified as Unit 21, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(Z) one (1) clean coal stacking tube, identified as Unit 22, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(AA) one (1) clean coal storage pile, identified as Unit 23, and exhausting to the atmosphere;

(BB) one (1) enclosed clean coal stacking tube transfer conveyor, identified as Unit 24, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(CC) one (1) clean coal stacking tube, identified as Unit 25, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(DD) one (1) clean coal storage pile, identified as Unit 26, and exhausting to the atmosphere;

(EE) one (1) enclosed clean coal underground reclaim tunnel and one (1) enclosed clean coal loadout conveyor, identified as Unit 27, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(FF) one (1) enclosed clean coal loadout conveyor, identified as Unit 28, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(GG) one (1) clean coal storage bin with train loadout, identified as Unit 29, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(HH) one (1) enclosed industrial steam coal loadout conveyor, identified as Unit 30, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(II) one (1) industrial steam coal storage pile, identified as Unit 31, and exhausting to the atmosphere;

(2) Dry Crush Circuit

(A) one (1) raw coal storage pile, identified as Unit 32, exhausting to the atmosphere;

(B) one (1) feeder bin system, identified as Unit 33, with a maximum capacity of 2000 tons per hour exhausting to the atmosphere;

(C) one (1) feeder bin outlet drop to raw coal conveyor, identified as Unit 34, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(D) one (1) enclosed raw coal conveyor, identified as Unit 35, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(E) one (1) scalping screen, identified as Unit 36, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(F) one (1) rotary breaker, identified as Unit 37, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(G) one (1) enclosed breaker outlet coal conveyor, identified as Unit 38, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(H) one (1) enclosed coarse coal conveyor, identified as Unit 39, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(I) one (1) coarse coal storage pile, identified as Unit 40, exhausting to the atmosphere;

(J) one (1) crusher, identified as Unit 41, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(K) one (1) enclosed dry crush coal conveyor with radial stacker, identified as Unit 42, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(L) one (1) dry crush coal storage pile (unloading to the underground reclaim tunnel), identified as Unit 43, exhausting to the atmosphere;

(3) Dry Stoker Circuit

(A) one (1) feeder bin system, identified as Unit 44, with a maximum capacity of 400 tons per hour exhausting to the atmosphere;

(B) one (1) feeder bin outlet drop to coal conveyor, identified as Unit 45, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(C) one (1) coal conveyor, identified as Unit 46, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(D) one (1) screen, identified as Unit 51, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(E) one (1) collecting coal conveyor, identified as Unit 50, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(F) one (1) oversized (stoker) coal stacker conveyor, identified as Unit 52, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(G) one (1) oversized (stoker) coal storage pile, identified as Unit 53, exhausting to the atmosphere;

(H) one (1) fines coal stacker conveyor, identified as Unit 54, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(I) one (1) fines coal storage pile, identified as Unit 55, exhausting to the atmosphere;

- Under 40 CFR 60, Subpart Y, the equipment and activities associated with the coal preparation and processing plant listed under item (c) above are considered affected facilities. [40 CFR 60, Subpart Y][326 IAC 12]

## SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, M153-28491-00011, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.9 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The Permittee shall implement the PMPs.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to M153-28491-00011 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.12 Permit Renewal [326 IAC 2-6.1-7]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.15 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2] [IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.17 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ.

(b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.18 Credible Evidence [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

**Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]**

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1][IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three

(3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

**Testing Requirements [326 IAC 2-6.1-5(a)(2)]**

C.8 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

**Compliance Requirements [326 IAC 2-1.1-11]**

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

**Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]**

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 Instrument Specifications [326 IAC 2-1.1-11]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

**Corrective Actions and Response Steps**

C.12 Response to Excursions or Exceedances

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

**Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]**

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.16 General Reporting Requirements [326 IAC 2-1.1-11][326 IAC 2-6.1-2][IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

**SECTION D.1 FACILITY OPERATION CONDITIONS**

**Emissions Unit Description:**

(a) one (1) open pit surface coal mining operation, approved for construction in 2005 and approved for increased production in 2010, with a maximum production rate of 15,918,500 tons of raw coal and coal refuse per year, combined, with fugitive emissions emitted to the atmosphere, including the following activities:

(1) two (2) draglines, identified as Bucyrus Erie 2550 and Bucyrus Erie 2570-W, approved for construction and operation at the Bear Run Mine in 2005 and 2010, respectively;

(2) removal and stockpiling of topsoil and subsoil layers using scrapers bulldozers, front-end loaders, haul trucks, and other machinery;

(3) drilling and blasting of the rocky material (overburden) covering the coal seam;

(4) removal and stockpiling of overburden using two (2) draglines, scrapers, bulldozers, front-end loaders, haul trucks, and other machinery;

(5) removal and stockpiling of broken coal using shovels, bulldozers, front-end loaders, haul trucks, and other machinery;

(6) storage piles consisting of topsoil, subsoil, overburden, and/or coal;

(7) loading of broken coal into haul trucks using shovels, front-end loaders, and other machinery;

(8) transport of coal at the coal mine site on unpaved haul roads;

(9) coal mine reclamation activities, including replacement and grading of overburden, subsoil, and topsoil using scrapers, bulldozers, front-end loaders, haul trucks, and other machinery;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]**

D.1.1 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions at the coal mine site shall be controlled according to the attached plan as in Attachment A.

**SECTION D.2 FACILITY OPERATION CONDITIONS**

**Emissions Unit Description:**

(b) transport of coal at the coal preparation and processing plant site on unpaved roads;

(c) one (1) coal preparation and processing plant, constructed in 2010 and approved for increased production in 2010, with a maximum processing rate of 15,918,500 tons of raw coal and coal refuse per year, combined, including the following equipment and activities:

(1) Process Circuit

(A) one (1) raw coal storage pile, identified as Unit 1, exhausting to the atmosphere;

(B) one (1) coal truck unloading station for the Process Circuit, identified as Unit 2, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(C) one (1) feeder bin, identified as Unit 3, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(D) one (1) enclosed raw coal conveyor, identified as Unit 4, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(E) one (1) scalping screen, identified as Unit 5, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(F) one (1) rotary breaker, identified as Unit 6, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(G) one (1) rotary breaker outlet drop to breaker reject storage pile, identified as Unit 7, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(H) one (1) breaker reject storage pile, identified as Unit 8, and exhausting to the atmosphere;

(I) one (1) enclosed raw coal conveyor, identified as Unit 9, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(J) one (1) raw coal stacking tube, identified as Unit 10, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(K) one (1) raw coal storage pile, identified as Unit 11, and exhausting to the atmosphere;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Emissions Unit Description: Continued**

(L) one (1) enclosed raw coal stacking tube transfer conveyor, identified as Unit 12, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(M) one (1) raw coal stacking tube, identified as Unit 13, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(N) one (1) raw coal storage pile, identified as Unit 14, and exhausting to the atmosphere;

(O) one (1) raw coal underground reclaim tunnel and one (1) raw coal conveyor, identified as Unit 15, with a maximum capacity of 2000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(P) one (1) enclosed coal washing and processing unit, identified as Preparation Plant, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(Q) one (1) enclosed coal refuse conveyor, identified as Unit 16, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(R) one (1) reject bunker storage pile, identified as Unit 17, and exhausting to the atmosphere;

(S) one (1) enclosed coal refuse storage bin with truck loadout, identified as Unit 18, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(T) one (1) enclosed stoker coal conveyor, identified as Unit 19, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(U) one (1) stoker coal storage bin with loadout weigh belt, identified as Unit 20, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(V) one (1) enclosed stoker coal conveyor, identified as Unit 20a, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(W) one (1) stoker coal stacking conveyor, identified as Unit 20b, with a maximum capacity of 500 tons per hour, and exhausting to the atmosphere;

(X) one (1) stoker coal storage pile, identified as Unit 20c, and exhausting to the atmosphere;

(Y) one (1) enclosed clean coal conveyor, identified as Unit 21, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

**Emissions Unit Description: Continued**

(Z) one (1) clean coal stacking tube, identified as Unit 22, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(AA) one (1) clean coal storage pile, identified as Unit 23, and exhausting to the atmosphere;

(BB) one (1) enclosed clean coal stacking tube transfer conveyor, identified as Unit 24, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(CC) one (1) clean coal stacking tube, identified as Unit 25, with a maximum capacity of 2000 tons per hour, and exhausting to the atmosphere;

(DD) one (1) clean coal storage pile, identified as Unit 26, and exhausting to the atmosphere;

(EE) one (1) enclosed clean coal underground reclaim tunnel and one (1) enclosed clean coal loadout conveyor, identified as Unit 27, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(FF) one (1) enclosed clean coal loadout conveyor, identified as Unit 28, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(GG) one (1) clean coal storage bin with train loadout, identified as Unit 29, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(HH) one (1) enclosed industrial steam coal loadout conveyor, identified as Unit 30, with a maximum capacity of 4000 tons per hour, using water misting for particulate control, and exhausting to the atmosphere;

(II) one (1) industrial steam coal storage pile, identified as Unit 31, and exhausting to the atmosphere;

(2) Dry Crush Circuit

(A) one (1) raw coal storage pile, identified as Unit 32, exhausting to the atmosphere;

(B) one (1) feeder bin system, identified as Unit 33, with a maximum capacity of 2000 tons per hour exhausting to the atmosphere;

(C) one (1) feeder bin outlet drop to raw coal conveyor, identified as Unit 34, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

**Emissions Unit Description: Continued**

(D) one (1) enclosed raw coal conveyor, identified as Unit 35, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(E) one (1) scalping screen, identified as Unit 36, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(F) one (1) rotary breaker, identified as Unit 37, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(G) one (1) enclosed breaker outlet coal conveyor, identified as Unit 38, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(H) one (1) enclosed coarse coal conveyor, identified as Unit 39, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(I) one (1) coarse coal storage pile, identified as Unit 40, exhausting to the atmosphere;

(J) one (1) crusher, identified as Unit 41, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(K) one (1) enclosed dry crush coal conveyor with radial stacker, identified as Unit 42, with a maximum capacity of 2000 tons per hour, exhausting to the atmosphere;

(L) one (1) dry crush coal storage pile (unloading to the underground reclaim tunnel), identified as Unit 43, exhausting to the atmosphere;

(3) Dry Stoker Circuit

(A) one (1) feeder bin system, identified as Unit 44, with a maximum capacity of 400 tons per hour exhausting to the atmosphere;

(B) one (1) feeder bin outlet drop to coal conveyor, identified as Unit 45, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(C) one (1) coal conveyor, identified as Unit 46, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(D) one (1) screen, identified as Unit 51, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(E) one (1) collecting coal conveyor, identified as Unit 50, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(F) one (1) oversized (stoker) coal stacker conveyor, identified as Unit 52, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

**Emissions Unit Description: Continued**

(G) one (1) oversized (stoker) coal storage pile, identified as Unit 53, exhausting to the atmosphere;

(H) one (1) fines coal stacker conveyor, identified as Unit 54, with a maximum capacity of 400 tons per hour, exhausting to the atmosphere;

(I) one (1) fines coal storage pile, identified as Unit 55, exhausting to the atmosphere;

Under 40 CFR 60, Subpart Y, the equipment and activities associated with the coal preparation and processing plant listed under item (c) above are considered affected facilities.
[40 CFR 60, Subpart Y][326 IAC 12]

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]**

D.2.1 Coal Moisture Content and Particulate Matter (PM) Emission Limitations [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable, the source shall comply with the following:

(a) PM emissions from the material processing, handling, crushing, screening, and conveying operations at the coal preparation/processing plant shall not exceed 0.00502 pounds per ton of coal throughput;

(b) PM emissions from the material storage piles at the coal preparation/processing plant shall not exceed 0.00125 pounds per ton of coal throughput;

(c) PM emissions from the unpaved roads at the coal preparation and processing plant site shall not exceed 0.0251 pounds per ton of coal throughput;

(d) moisture content of the coal processed at the coal preparation/processing plant prior to washing in the Preparation Plant shall be equal to or greater than 10.0 percent by weight;

(e) moisture content of the coal processed at the coal preparation/processing plant after washing in the Preparation Plant shall be equal to or greater than 11.5 percent by weight;

(f) the throughput of coal, including raw coal and coal refuse, to the coal preparation/ processing plant shall be less than 15,918,500 tons per 12 consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, combined with the PM emissions from other emission units at the coal preparation/processing plant, shall limit the total PM emissions from the coal preparation/processing plant to less than 250 tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.2 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of the following facilities shall not exceed the allowable emission rates listed in the following table:

| Unit ID | Description | Process Weight Rate (tons per hour) | 326 IAC 6-3-2 Allowable Particulate Emission Rate (pounds per hour) |
|---|---|---|---|
| 1 | Raw coal storage pile | 2000 | 86.90 |
| 2 | Coal truck unloading station for the Process Circuit | 2000 | 86.90 |
| 3 | Feeder bin | 2000 | 86.90 |
| 4 | Raw coal conveyor | 2000 | 86.90 |
| 5 | Scalping screen | 2000 | 86.90 |
| 6 | Rotary breaker | 2000 | 86.90 |
| 7 | Rotary breaker outlet drop to breaker reject storage pile | 2000 | 86.90 |
| 9 | Raw coal conveyor | 2000 | 86.90 |
| 10 | Raw coal stacking tube | 2000 | 86.90 |
| 12 | Raw coal stacking tube transfer conveyor | 2000 | 86.90 |
| 13 | Raw coal stacking tube | 2000 | 86.90 |
| 15 | Raw coal conveyor | 2000 | 86.90 |
| 21 | Plant clean coal conveyor | 1600 | 83.83 |
| 22 | No. 4 clean coal stacking tube | 1600 | 83.83 |
| 24 | Clean coal stacking tube transfer conveyor | 1500 | 82.95 |
| 25 | No. 3 clean coal stacking tube | 1500 | 82.95 |
| 27 | Clean coal loadout conveyor No. 1 | 4000 | 96.96 |
| 28 | Clean coal loadout conveyor No. 2 | 4000 | 96.96 |
| 29 | Clean coal storage bin with train loadout | 4000 | 96.96 |
| 30 | Industrial steam coal loadout conveyor | 4000 | 96.96 |
| 32 | Raw coal storage pile | 2000 | 86.90 |
| 33 | Feeder bin system | 2000 | 86.90 |
| 34 | Feeder bin outlet drop to raw coal conveyor | 2000 | 86.90 |
| 35 | Raw coal conveyor | 2000 | 86.90 |
| 36 | Scalping screen | 2000 | 86.90 |
| 37 | Rotary breaker | 2000 | 86.90 |
| 38 | Breaker outlet coal conveyor | 2000 | 86.90 |
| 39 | Coarse coal conveyor | 2000 | 86.90 |
| 41 | Crusher | 2000 | 86.90 |
| 42 | Dry crush coal conveyor with radial stacker | 2000 | 86.90 |

These pounds per hour limitations were calculated with the following equations:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

When the process weight rate exceeds two hundred (200) tons per hour, the maximum allowable emission may exceed the emission rate derived by the equation above, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

D.2.3 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions at the coal preparation/processing plant shall be controlled according to the attached plan as in Attachment A.

D.2.4 General Provisions Relating to New Source Performance Standards (NSPS) [326 IAC 12-1] [40 CFR 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1, except as otherwise specified in 40 CFR 60, Subpart Y.

(b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

D.2.5 New Source Performance Standards (NSPS) for Coal Preparation and Processing Plants [40 CFR Part 60, Subpart Y][326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Y (included as Attachment B of this permit), which are incorporated by reference as 326 IAC 12, except as otherwise specified in 40 CFR Part 60, Subpart Y:

(a) For units that commenced construction, reconstruction or modification after October 27, 1974, and on or before April 28, 2008:

(1) 40 CFR 60.250(a) and (b)
(2) 40 CFR 60.251
(3) 40 CFR 60.254(a)
(4) 40 CFR 60.255(a)
(5) 40 CFR 60.257
(6) 40 CFR 60.258(b), (c), and (d)

(b) For units that commenced construction, reconstruction or modification after May 27, 2009:

(1) 40 CFR 60.250(a) and (d)
(2) 40 CFR 60.251
(3) 40 CFR 60.254(b) and (c)
(4) 40 CFR 60.255(b) through (h)
(5) 40 CFR 60.256(b) and (c)
(6) 40 CFR 60.257
(7) 40 CFR 60.258

D.2.6 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for the equipment and activities associated with the coal preparation and processing plant listed under item (c) of this section facility description box and their associated control devices. Section B – Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance Plan required by this condition.

**Compliance Determination Requirements**

D.2.7 Fugitive Particulate Matter Control

In order to demonstrate compliance with Conditions C.3, C.6, D.2.1(a), D.2.1(b), D.2.1(c), and D.2.3, the Permittee shall control fugitive particulate matter emissions according to the Fugitive Dust Control Plan.

D.2.8 Coal Moisture Content and Particulate Control

The Permittee shall use wet suppression as necessary to ensure compliance with Conditions C.3, C.6, D.2.1(d), D.2.1(e), D.2.2, and D.2.3. If weather conditions preclude the use of wet suppression, the Permittee shall perform a moisture content analysis of the coal to verify that the moisture content is equal to or greater than the moisture content limitations specified in D.2.1(d) and D.2.1(e). The method for the moisture content analysis shall be approved by IDEM, OAQ.

**Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]**

D.2.9 Visible Emissions Notations

(a) Visible emission notations of the process emission points for the equipment and activities associated with the coal preparation and processing plant listed under item (c) of this section facility description box shall be performed once per week during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

**Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]**

D.2.10 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.1(f), the Permittee shall maintain records of coal processed, including raw coal and coal refuse, at the coal preparation/ processing plant.

(b) To document the compliance status with Condition D.2.8, the Permittee shall maintain records of coal moisture content analyses, when moisture content analyses are performed.

(c) To document the compliance status with Condition D.2.9, the Permittee shall maintain records of the visible emission notations of the process emission points for the equipment and activities associated with the coal preparation and processing plant listed under item (c) of this section facility description box. The Permittee shall include in its records when a visible emission notation is not taken and the reason for the lack of visible emission notation, (e.g., the process did not operate that day).

(d) Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.